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COLONIES OF INSECTS, MITES, TICKS, SPIDERS,

AND INSECT CELL LINES

MAINTAINED IN LABORATORIES OF THE ENTOMOLOGY RESEARCH

AND MARKET QUALITY RESEARCH DIVISIONS OF

THE AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE L/D #2

Revised 1969

Compiled by Biological Investigations,

Pesticide Chemicals Research Branch, Entomology Research Division,

Agricultural Research Service

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This revision was made in the Entomology Research of the Agricultural Research of insect cell lines cultured.

Two hundred and thirty are currently maintained and fifty-six species of Quality Research Division Divisions.

ion of 70 laboratories Quality Research Division, it includes a listing of laboratories.

s, ticks, and spiders Research Division of the Market reported for the two

Federal and state regulations governing the interstate shipment of living insects, mites, and ticks and such importations from foreign countries should be strictly adhered to. Request for federal permits for shipments and questions relative to regulations should be directed to the regulatory agencies as indicated below:^{1/}

Type of Organism	Contact
Plant pests coming under Federal domestic quarantines or cooperative Federal State programs.	Director, Plant Pest Control Div. U. S. Dept. of Agriculture Federal Center Building Hyattsville, Md. 20782
All plant pests being imported and those plant pests being moved interstate that are not under Federal domestic quarantines.	Director, Plant Quarantine Div. U. S. Dept. of Agriculture Federal Center Building Hyattsville, Md. 20782
Importation or movement of animal pathogens or their vectors.	Director, Animal Health Div. U. S. Dept. of Agriculture Federal Center Building Hyattsville, Md. 20782

<u>Type of Organism</u>	<u>Contact</u>
Importation, and distribution after importation, of pathogens, vectors, or potential vectors of concern to public health.	Chief, Foreign Quarantine Program National Communicable Disease Center United States Public Health Service Atlanta, Georgia 30333
	or
	Public Health Service Quarantine Stations at United States ports of entry.

- 1/ Requests originating from Entomology Research Division personnel for movement of insects, mites, ticks, or other arthropods should be directed to Chief, Insect Identification and Parasite Introduction Research Branch, Entomology Research Division, ARS, Plant Industry Station, Beltsville, Maryland 20705.

A list of "Laboratory Colonies of Mites, Ticks and Insects in Canada" is issued each year by the Research Branch, Canada Department of Agriculture, Ottawa, Ontario. Copies of this list may be obtained from the Research Coordinator (Crop Protection).

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^{1/} Number in parentheses indicates number of species.

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ARANEIDA

Misumenops celer (Hentz)

Wild	Stillwater, Okla. 1968	Studies on life history and mass rearing technique	39
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ACARINA

Acarus siro L. - grain mite

Inbred	Madison, Wis. prior to 1960	Laboratory studies	77
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Amblyomma americanum (L.) - lone star tick

Inbred	Colonized 1946 Orlando, Fla., from wild stock near Savannah, Ga.		43
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Wild, inbred	AA Kerrville, Tex. 1957	Insecticide trials	49
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Amblyomma maculatum Koch - Gulf Coast tick

Wild, inbred	AM Raymondville, Tex., 1964	Insecticide trials	49
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Anocentor nitens (Neumann) - tropical horse tick

Wild, inbred	N Raymondville, Tex., 1963	Insecticide trials	49
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Wild - infected with <u>Babesia</u> <u>caballi</u>	Dade Co., Fla., 1965	Equine piroplasmosis transmission studies	47
Wild, not infected	Dade Co., Fla., 1966	Disease transmission studies	47
<u>Boophilus annulatus</u> (Say) - cattle tick			
Wild, ANN inbred	Tamaulipas, Mex., 1963	Insecticide trials	49
<u>Boophilus microplus</u> (Canestrini) - southern cattle tick			
Wild, MIC inbred	Nuevo Leon, Mex., 1963	Insecticide trials	49
<u>Dermacentor albipictus</u> (Packard) - winter tick			
AL-III	Kerrville, Tex. 1968	Bovine anaplasmosis transmission studies	45
Wild, DA inbred	Kerrville, Tex. 1967	Insecticide trials	49
<u>Dermacentor andersoni</u> Stiles - Rocky Mountain wood tick			
AN-I	Hamilton, Mont. 1967	Bovine anaplasmosis transmission studies	45
<u>Dermacentor variabilis</u> (Say) - American dog tick			
Wild, Gainesville	Gainesville, Fla. 1967	Insecticide trials and tick paralysis studies	43
Austin Cary	Gainesville, Fla. 1968		43
Manatee	Manatee County, Fla., 1968		43

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
	<u>Dermacentor variabilis</u> (Say)	- American dog tick (cont.)			
	VAR-I	Gainesville, Fla.	Bovine anaplasmosis transmission studies		45
	Wild, inbred	DV Hamilton, Mont. 1965	Insecticide trials		49
	<u>Eriophyes insidiosus</u>	Keifer & Wilson			
	Wild	Riverside, Calif. 1968	Used in biological and plant virus-vector studies.		12
	<u>Eutetranychus banksi</u>	(McGregor) - Texas citrus mite			
	Wild	Orlando, Fla. 1966	Biological control studies		15
	<u>Panonychus citri</u>	(McGregor) - citrus red mite			
	Wild	Whittier, Calif. pre 1960	General laboratory studies, mass production virus inoculum		13
	Albino	Riverside, Calif. laboratory, 1962	Genetic marker for disease and biology studies. Stingle Mendelian recessive. Fitness (compared to wild type) - Equal. Description: Various shades green depending on food.		13
	<u>Panonychus ulmi</u>	(Koch) - European red mite			
		Vincennes, Ind.	Attractant, biological and chemical control studies.		18
	<u>Phyllocopturta oleivora</u>	(Ashmead) - citrus rust mite			
	Wild	Orlando, Fla. 1961	Laboratory screening of acaricides		15

<u>Rhipicephalus sanguineus</u> (Latreille) - brown dog tick			
Wild, RS inbred	Laredo, Tex. 1967	Insecticide trials	49
Wild	Anne Arundel Co., Md., 1968	Disease transmission studies	47
<u>Tetranychus cinnabarinus</u> (Boisduval) - carmine spider mite			
Wild (resistant)	College Station OP- prior to 1958 resistant	Bioassay	11
Insect susceptible	Beltsville	Beltsville, Md. 1938 Acaricide tests, host tolerance, and genetic studies.	64
<u>Tetranychus turkestan</u> Ugarov and Nikolski			
	Univ. of Del. 1967	Acaricide studies; host preference studies.	64
<u>Tetranychus urticae</u> Koch - two-spotted spider mite			
Wild, inbred miticide resistant	Somerville 1963	Somerville Planta- tion, Minter City, Miss., 1963 Laboratory study of injury to plants, miticide screening.	7
Wild	State College, Miss., 1968	Host plant resistance studies.	8
Wild	Vincennes, Ind. 1956	Attractant, biological, and chemical control studies.	18
Wild	Kearneysville, W. Va.	Acaricide screening	18
Wild	Kearneysville, W. Va., 1969	Host of predaceous mite	24

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Tetranychus urticae</u> Koch - two-spotted spider mite (cont.)				
Wild		Columbia, Mo. 1966	Biological studies	52
Wild		Texas A&M, 1957	Acaricide screening	59
Insecticide susceptible	Niagara	Niagara Chem. Div. 1948	Acaricide tests, host tolerance, and genetic studies	64
Parathion resistant	Cranbury-1	Cranbury, N. J. 1948	do	64
Kelthane resistant	Cranbury-10	Cranbury-1 by selection with Kelthane	Acaricide tests, host tolerance, and genetic studies. Colony less stable to Kelthane when tested at irregular intervals. Parathion resistance in Cranbury-1, retained without treatment with any acaricide.	64
	1	Yakima, Wash., 1966	Host plant resistance studies.	69
<u>Typhlodromus fallacis</u> (Garman)				
Wild		Kearneysville, W. Va. 1969	Mite predator studies	24
<u>Tyrophagus putrescentiae</u> (Schrank) - mushroom mite				
Wild		Illinois 1967	Laboratory studies	77
<u>Blaberus craniifer</u> (Dummeister)				
Inbred		Army Chem. Ctr., Aberdeen, Md. 1955	Insecticide evaluation	57

ORTHOPTERA

<u>Blaberus discoidalis</u> (Serville)				
Inbred	Beltsville, Md. 1962	Insecticide evaluation		57
<u>Blaberus giganteus</u> (L.)				
	^{sp} Illinois, 1964			10
Inbred	Rutgers, N. J. 1965	Neurochemical studies		56
Inbred	National Zoo, Washington, D.C. 1950			57
<u>Blatta orientalis</u> L. - oriental cockroach				
Inbred	Tifton, Ga. 1961	Bioassays; susceptibility baselines		43
Inbred	National Zoo, Washington, D. C. 1947	Insecticide evaluation		57
<u>Blattella germanica</u> (L.) - German cockroach				
	Orlando, Fla. 1961			10
Inbred	Orlando normal	Bioassays; susceptibility baselines		43
Inbred	VPI normal	do		43
Inbred	Rutgers normal	do		43
Mutant	Orlando "brown"	Genetic studies. Description: Pronotal stripes and body light brown color.		43
Insecticide resistant	"C" colony	Resistance studies. Special handling - Selection with chlordane.		43

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Blattella germanica</u> (L.) - German cockroach (cont.)				
Insecticide resistant	"M" colony	Orlando, Fla. 1956	Resistance studies. Special handling - Selection with malathion.	43
Insecticide resistant	"CM-A" colony	Orlando, Fla. 1956	Resistance studies. Special handling - Selection with chlordane and malathion alternately.	43
Inbred	"CM-C" colony	Orlando, Fla. 1956	Resistance studies. Special handling - Selection with chlordane and malathion.	43
Inbred	Pyrethrins colony "A"	Orlando, Fla. 1956	Resistance studies. Special handling - Selection with synergized pyrethrins.	43
Insecticide resistant	Diazinon	Orlando, Fla. 1958	Resistance studies. Special handling - Selection with diazinon	43
Insecticide resistant	Bayer 29493	Orlando, Fla. 1959	Resistance studies. Special handling - Selection with Bayer 29493.	43
Insecticide resistant	Bayer 39007	Orlando, Fla. 1962	Resistance studies. Special handling - Selection with Bayer 39007.	43
Pyrethrin resistant	Fort Rucker	Ft. Rucker, Ala. 1955	Resistance studies	43
ChH. resistant	NPCA	Corpus Christi, Tex., 1952	do	43
Malathion resistant	Camp Johnson	Camp Leroy Johnson, La., 1963	do	43
Malathion resistant	Ft. Polk	Ft. Polk, La. 1965	do	43

Insecti- Hazard cide susceptible	Hazard Laboratory, Wilmington, Ohio	Insecticide evaluation	57
Insecti- Zoo cide susceptible	Mixture of susceptible strains - Beltsville, Md., 1969	do	57
Insecti- Greenbelt cide 1962 resistant	Greenbelt, Md. 1962	do	57
do Belair 1967	Bowie, Md. 1967	do	57
do Riverdale	Riverdale, Md. 1968	do	57
do Mixture 1966	Mixture of 4 resistant strains 1966	Contemplated standard strain	57
	Mixture of resistant strains, Beltsville, Md. 1969	Insecticide evaluation	57
<u>Blattella vaga</u> Hebard			
	Lyman Ent. Museum MacDonald College, Quebec, 1968	Insecticide evaluation	57
<u>Byrsotria fumigata</u> (Guerin)			
Inbred	Beltsville, Md. 1962	Biological studies	57
<u>Diploptera punctata</u> (Eschscholz) - Pacific beetle cockroach			
Inbred	Beltsville, Md. 1962	Insecticide evaluation	57
<u>Eurycotis floridana</u> (Walker)			
Inbred	Orlando normal	Bioassays; susceptibility baselines	43

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
	<u>Eurycotis floridana</u>	(Walker) - (cont.)			
Inbred		Philadelphia, Pa. 1953	Insecticide evaluation	57	
	<u>Gromphadorhina brunneri</u>	Butler			
		Univ. of Md. 1967	Biological studies	57	
	<u>Gromphadorhina portentosa</u>	(Schaum)			
Inbred		FMC, Middleport, N.Y. 1963	Biological studies	57	
	<u>Leucophaea maderae</u>	(F.) - Madeira cockroach			
Inbred		Washburn Univ. Topeka, Kan. 1965	Tissue culture studies and physiological studies.	56	
Inbred		Army Chem. Ctr., Aberdeen, Md. 1955	Insecticide evaluation, biorhythm studies	57	
	<u>Melanoplus bivittatus</u>	(Say) - two-striped grasshopper			
Wild		Field collected eggs usually available	Insecticide screening and disease studies	37	
	<u>Melanoplus differentialis</u>	(Thomas) - differential grasshopper			
		Oklahoma 1968	Toxicological investigations	40	
Inbred	diapause	Bozeman, Mont. 1964	Tissue culture studies and chemo- sterilant research	56	
Inbred	non-diapause	Phila., Pa. 1968	do		

<u>Melanoplus sanguinipes sanguinipes</u> (F.) - migratory grasshopper			
Wild	Field collected eggs usually available	Insecticide screening tests with disease and resistant grasses.	37
<u>Nauphoeta cinerea</u> (Olivier)			
Inbred	Tampa normal	Tampa, Fla. 1964	Bioassays; susceptibility baselines
Inbred		Tampa, Fla. 1952	Insecticide evaluation
<u>Panchlora nivea</u> (L.) - Cuban cockroach			
Inbred	Gainesville normal	Gainesville, Fla. 1963	Bioassays; susceptibility baselines
<u>Parcoblatta pennsylvanica</u> (De Geer)			
Wild		Crownsville, Md. June 1967	Biological studies
<u>Periplaneta americana</u> (L.) - American cockroach			
		Orlando, Fla. 1962	10
Inbred	Orlando normal	Valdosta, Ga. 1947	Bioassays; susceptibility baselines
Inbred		Gainesville, Fla. 1964	Physiological studies
Inbred		National Zoo, Washington, D.C. 1939	Insecticide evaluations
Inbred		England, 1963	White-eyed strain
<u>Periplaneta australasiae</u> (F.) - Australian cockroach			
Inbred	Gainesville normal	Gainesville, Fla. 1966	Bioassays; susceptibility baselines

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
	<u>Periplaneta australasiae</u>	(F.) - Australian cockroach	(cont.)		
Inbred		U. of Minn. 1954	Insecticide evaluations	57	
	<u>Periplaneta brunnea</u>	Burmeister - brown cockroach			
Inbred	Gainesville normal	Gainesville, Fla. 1966	Bioassays; susceptibility baselines	43	
Insecti- cide resistant	Gulf	Gulf Res. & Dev. Ctr. Pittsburgh, Pa. 1968	Resistance studies	43	
Inbred	normal	Beltsville, Md. 1953	Insecticide evaluations	57	
Inbred	resistant	Gulf, Pittsburgh, Pa. 1968	do	57	
	<u>Periplaneta fuliginosa</u>	(Serville) - smoky-brown cockroach			
Inbred	Tifton normal	Tifton, Ga. 1961	Bioassays; susceptibility baselines	43	
Inbred		Ft. Sam Houston, Tex. 1963	Insecticide evaluations	57	
	<u>Pycnoscelus surinamensis</u>	(L.) - Surinam cockroach			
Inbred	Orlando normal	Orlando, Fla. 1958	Bioassays; susceptibility baselines	43	
	<u>Schistocerca americana</u>	(Drury) - American grasshopper			
Wild		Tifton, Ga. 1964	Tests with disease.	37	
	<u>Schistocerca vaga</u>	(Scudd.)			
Inbred		Bozeman, Mont. 1966	Chemosterilant and physiological studies	56	

<u>Supella supellectilium</u> (Serville) - brown-banded cockroach			
	Orlando, Fla. 1962		10
Inbred Orlando normal	Orlando, Fla. 1957	Bioassays; susceptibility baselines	43
Inbred	Mixture of strains Beltsville, Md. 1969	Insecticide evaluations, resistance studies	57
<u>Symploce hospes</u> (Perkins)			
	Lyman Ent. Museum MacDonald College Quebec 1968	Insecticide evaluations, resistance studies	57
<u>MALLOPHAGA</u>			
<u>Bovicola crassipes</u> (Redow) - hairy biting goat louse			
Wild, inbred	Kerrville, Tex. 1967	Biology and insecticide tests	49
<u>Bovicola limbata</u> (Gervais) - Angora goat biting louse			
Wild, inbred	Kerrville, Tex. 1967	do	49
<u>ANOPLURA</u>			
<u>Pediculus humanus humanus</u> L. - body louse			
Inbred Standard	Gainesville, Fla. 1966 from regular strain started in Orlando, Fla. in 1942		43
Inbred Korean A (DDT)	1951 at Orlando, Fla. from Korea	Special handling - pressure with DDT	43

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Pediculus humanus L.</u> - body louse (cont.)				
Inbred	Freetown A (lindane)	1956 at Orlando, Fla. from S. Africa	Special handling - pressure with lindane	43
Inbred	Freetown C (carbaryl)	1959 at Orlando, Fla. from Freetown A	Special handling - pressure with carbaryl	43
<u>THYSANOPTERA</u>				
<u>Amynothrips andersoni</u> O'Neill - alligatorweed thrips				
Inbred		Buenos Aires, Argentina, 1967	Biological control of alligatorweed	51
<u>Cimex hemipterus</u> (F.)				
Insecticide resistant	Malaya colony	Selangor, Malaya 1959	Resistance studies	43
<u>Cimex lectularius</u> L. - bed bug				
Inbred	Orlando normal	Orlando, Fla. 1951	Bioassays; susceptibility baseline	43
Insecticide resistant	"D" colony	Orlando, Fla. 1956	Resistance studies. Special handling - selection with DDT.	43
do	"M" colony	do	Resistance studies. Special handling - selection with malathion.	43

do	"DM-A" colony	do	Resistance studies. Special handling - selection with DDT and malathion, alternately.	43
do	"DM-C" colony	do	Resistance studies. Special handling - selection with DDT and malathion.	43
do	Valley Forge	USS Valley Forge 1957	Resistance studies	43
<u>Geocoris punctipes</u> (Say)				
Wild		Tucson, Ariz. 1965	Biological predation studies.	5
<u>Lygus hesperus</u> Knight				
				25
Inbred		Riverside, Calif.		61
<u>Oncopeltus fasciatus</u> (Dallas) - large milkweed bug				
		Insect Physiology Lab. Evaluation of candidate insect hormonal agents Beltsville, Md. 1969		58
<u>Podisus maculiventris</u> (Say) - spined soldier bug				
Wild		Columbia, Mo. 1967	Biological studies	52
<u>Sycanus indagator</u> Stal				
		Moorestown, N. J.	Biology studies and field release.	31
<u>Triatoma infestans</u> (Klug)				
Inbred		USPHS, Savannah, Ga. 1965		43

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>HEMIPTERA (HOMOPTERA)</u>				
	<u>Acyrthosiphon pisum</u>	(Harris) - pea aphid		
Wild, biotype	ENT PA-1	Bakersfield, Calif. 1959	Testing clones, lines, and varieties for resistance. Special handling - purified annually by selection of single parthenogenetic female.	25
	Mesa, Ariz.		Testing clones, lines, and varieties for resistance.	25
	Corvallis, Ore.		do	25
	Reno, Nev.		do	25
Wild		Nebraska, 1968	Screening for host plant resistance and studies on host selection and host resistance.	38
	1	Yakima, Wash. 1965	Parasite propagation and diapause studies.	69
	<u>Aonidiella aurantii</u>	(Maskell) - California red scale		
Wild		Pre 1960 Whittier, Calif.	General laboratory studies, and collection of pheromones.	13
	<u>Aonidiella citrina</u>	(Coquillett) - yellow scale		
Wild		Riverside, Calif. 1967	Mass rearing, collection of pheromones, and general laboratory studies.	13
	<u>Aphis gossypii</u>	Glover - cotton aphid, melon aphid		
Wild, susceptible	State College, Miss 1968	State College, Miss. 1968	Host plant resistance studies - cotton.	8

Wild, susceptible	College Station	College Station, Tex. prior to 1958	Bioassay	11
Wild, susceptible	College Station	Orlando, Fla. 1960	Virus vector studies	15
Wild		Calif. 1968	Transmission studies	40
		Beltsville, Md. 1938	Insecticide tests and virus vector studies. Reared on various host plants as viviparous females.	64
<u>Brevicoryne brassicae</u> (L.) - cabbage aphid				
Wild		Columbia, Mo. 1966	Biological studies.	52
<u>Carneiocephala nuda</u> Nottingham				25
<u>Carneiocephala trigtattata</u> Nottingham				
<u>Circulifer tenellus</u> (Baker) - beet leafhopper				62
		Twin Falls, Idaho	Mass rearing fro experimental work directed toward control.	
<u>Coccus hesperidum</u> L. - brown soft scale				
Wild	Texas	Weslaco, Tex. 1962	Parasite and biological studies.	22
<u>Delphacodes campestris</u> (Van Duzee)				
Wild		South Dakota 1965	Life history studies.	40
<u>Deltocephalus sonorus</u> Ball				
Wild		Ohio, 1964	Life history studies.	40

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Empoasca fabae</u> (Harris) - potato leafhopper			
Wild		Nebraska, 1966	Screening for host plant resistance and studies on host selection and host resistance.	38
		Columbia, Mo. 1968	Plant resistance and disease transmission studies.	36
	<u>Exitianus exitiosus</u> (Uhler)			
Wild		Ohio 1965	Life history studies.	40
	<u>Graminella nigrifrons</u> (Forbes)			
Wild		Ohio 1964	Life history studies.	40
	<u>Hyadaphis pseudobrassicae</u> (Davis) - turnip aphid			
		Ames, Iowa 1967	Host plant resistance studies	29
Wild		Columbia, Mo. 1966	Biological studies	52
Wild		Charleston, S. C. 1967	Host plant resistance	67
	<u>Macrosiphum avenae</u> (F.) - English grain aphid			
Wild		Stillwater, Okla. 1968	Studies on damage to small grains - parasite rearing	39
Wild		Centerville, S. D. 1968	Biological experimentation.	40
Wild		Brookings, S. D.	Disease-vector relationship studies.	40

<u>Macrosiphum euphorbiae</u> (Thomas) - potato aphid			
Beltsville, Md. 1957	Biology, host plant resistance.		64
<u>Macrostelus fascifrons</u> (Stal) - aster leafhopper			
Beltsville, Md. 1968	Virus vector studies		29
Columbia, Mo. 1968	Plant resistance and disease transmission studies		36
Wild	Transmission studies.		40
<u>Myzus persicae</u> (Sulzer) - green peach aphid			
Ames, Iowa 1967	Host plant resistance studies.		29
California 1968	Transmission studies.		40
Wild	Biological studies.		52
Columbia, Mo. 1966	Virus transmission studies.		63
Presque Isle, Me. 1941			
Beltsville, Md. 1942	Insecticide tests and virus vector studies. Reared on collards as viviparous females.		64
<u>Phylloxera vitifoliae</u> (Fitch) - grape phylloxera			
Wild	Artificial infestation of grape rootstocks for resistant tests.		21
<u>Planococcus citri</u> (Risso) - citrus mealybug			
Wild	Insecticide evaluations.		65

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
	<u>Psylla pyricola</u> Foerster	- pear psylla			
Wild		San Diego Co., Calif., 1968	Used in tests as vector of viruses in pears.	12	
	<u>Rhopalosiphum fitchii</u>	(Sanderson) - apple grain aphid			
Wild		Stillwater, Okla. 1968	Studies on damage to small grain, parasite rearing.	39	
	<u>Rhopalosiphum maidis</u>	(Fitch) - corn leaf aphid			
Wild		Okla., 1968	Studies on damage to small grains, parasite rearing	39	
Wild		Brookings, S. D. 1965	Disease-vector relationship	40	
	<u>Rhopalosiphum padi</u>	(L.)			
Wild		Centerville, S. D. 1968	Biological experimentation	40	
Wild		Brookings, S. D.	Disease-vector relationship	40	
	<u>Saissetia oleae</u>	(Bernard) black scale			
Wild		Weslaco, Tex. 1967	Host for <u>Metaphycus luteolus</u>	22	
	<u>Schizaphis graminum</u>	(Rondani) - greenbug			
Wild		Biotype A Stillwater, Okla. 1952	Studies on biology and greenbug resist- ance in small grains and sorghums.	39	

Wild	Biotype B	Stillwater, Okla. 1966	do	39
Wild	Biotype C	Stillwater, Okla. 1968	do	39
Field		Oklahoma 1965	Resistance studies	40
Damages resistant wheats		Oklahoma 1965	Resistance studies. Resistant wheats found to be susceptible to this insect in greenhouse.	40
Wild		Centerville, S. D. 1968	Biological experimentation.	40
		Kansas	Screening cereal breeding lines and basic studies on effects on plant host. Obtained from colony origi- nated from single female at Kansas State College over 15 years ago.	40

Sipha flava (Forbes) - yellow sugarcane aphid

Wild		Stillwater, Okla. 1968	Small grain insects resistance studies.	39
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Therioaphis maculata (Buckton) - spotted alfalfa aphid

Wild	ENT A	El Centro, Calif. 1958	Testing clones, lines, and varieties for resistance. Strain scarce in wild populations. Usually purified twice annually by new selection of single female (parthenogenetic).	25
Wild		Nebraska, 1968	Screening for host plant resistance and other studies concerning host selection and host resistance.	38
Wild	Holocyclic	Nebraska 1967	Biological experimentation	38
Wild	Heterocyclic	Nebraska 1960	do	38

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Therioaphis riehmii</u>	(Borner) - sweetclover aphid		
Wild		Nebraska 1967	Screening for host plant resistance and other studies concerning host selection and host resistance.	38
	<u>Therioaphis trifolii</u>	(Monell) - yellow clover aphid		
Wild		Nebraska 1968	Screening for host plant resistance and biology studies.	38
	<u>Chrysopa carnea</u>	Stephens		
Wild		Riverside, Calif. 1966	Insect predation studies	11
	<u>Agrotis orthogonia</u>	Morrison - pale western cutworm		
		Brookings, S. D. 1969	Studies on rearing methods	40
	<u>Anagasta kuehniella</u>	(Zeller) - Mediterranean flour moth		
Inbred		Raleigh, N. C. 1964		56
Inbred		Raleigh, N. C. 1967	Biological studies	72

NEUROPTERA (PLANIPENNIA)

LEPIDOPTERA

Argyrotaenia velutinana (Walker) - red-banded leaf roller

Wild	Vincennes	Vincennes, Ind. 1961	Attractant, biological, and chemical control studies.	18
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Autographa biloba (Stephens)

Wild		Columbia, Mo. 1968	Biological studies	52
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Bombys mori (L.) - silkworm

		Canada 1966	Insect pathogen studies	54
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Cadra cautella (Walker) - almond moth

Inbred		Riverside, Calif. 1965	Laboratory and field studies	71
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Mutant	White-eye	From cultures reared 12 generations in laboratory - origin of wild strain Bainbridge, Ga. 1962	Marker strain for genetic and ecological studies; adult-eyes white, larval skin, eyes, and testes lack pigment.	72
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Wild		Tifton, Ga. 1964	Laboratory studies	72
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Insecti- cide re- sistant malathion		Sylvester, Ga. 1966 Columbus, Ga. 1964 Valdosta, Ga. 1967 Dawson, Ga. 1966	do do do do	72 72 72 72
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Inbred		Tifton, Ga. 1961	do	73
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Wild	Col-Bain	Bainbridge, Ga. 1962	Laboratory studies, white-eyed, mutant	73
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Inbred		Savannah, Ga. 1969	Laboratory studies	74
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STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Cadra figulilella</u> (Gregson)	- Raisin moth		
Wild		Kingsburg, Calif. 1967	Laboratory studies	71
	<u>Calophasia lunula</u> (Hufnagel)			
Inbred		Switzerland - thru Canadian Dept. of Agric., Belleville, Ontario	Biological control of <u>Linaria dalmatica</u> and <u>Linaria vulgaris</u>	51
	<u>Ceramica picta</u> (Harris)	- zebra caterpillar		
1		Yakima, Wash. 1965	Polyhedrosis virus studies	69
	<u>Chorizagrotis auxiliaris</u> (Grote)	- army cutworm		
		Brookings, S. D. 1969	Studies on rearing methods	40
	<u>Diatraea grandiosella</u> (Dyar)	- southwestern corn borer		
Wild, inbred		State College, Miss.	Host plant resistance studies, sex pheromone research, insecticide evaluations	35
	<u>Diatraea saccharalis</u> (F.)	- sugarcane borer		
Wild		Louisiana	Field insecticidal evaluations, sex attractant, and chemosterilant studies	31

Ephestia elutella (Hubner) - tobacco moth

Inbred	Richmond, Va. 1965	Laboratory studies	71	
Inbred	Richmond, Va. 1966	do	72	
Inbred		Pesticide evaluations	76	
Mutant	Red-eye	Cultures reared through more than 12 generations	Ecology studies	76

Ephestia figulilella Gregson

Fresno, Calif. 1968	Biological studies	72
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Estigmene acrea (Drury) - salt-marsh caterpillar

Wild	Tucson, Casa Grande, Ariz. 1963	Biological testing, parasite-predator host-prey.	5
Uni- sexual	Baton Rouge, La. 1966	Sex determination and sex pheromone studies.	6
Bisexual	Baton Rouge, La. 1966	do	6
Wild	College Station, Tex., 1965	Bioassay	11
	Arizona		53
	New Jersey	Insect pathogen studies	54

Galleria mellonella (L.) - greater wax moth

Baton Rouge, La. 1968	Male sterile technique being developed for eradication or control	1
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STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Galleria mellonella</u> (L.) - greater wax moth (cont.)			
		Beltsville, Md. 1952	Insect pathogen studies.	54
		Beltsville, Md. 1952	Mass reared as test insect in pathology studies and for propagating parasites.	55
Inbred		Fresno, Calif. 1966	Laboratory studies.	71
	<u>Grapholitha molesta</u> (Busch) - oriental fruit moth			
		Geneva, N. Y. 1965		10
	<u>Heliothis virescens</u> (F.) - tobacco budworm			
Wild		Tucson, Ariz. 1967	Hosts for parasites.	5
Wild, inbred	Stoneville 68v2	Stoneville, Miss. 1968	Standby colony.	7
Wild, inbred		Florence, S. C. 1966	Toxicological and physiological studies. Field adults added in August 1968.	9
		Tucson, Ariz. 1968		10
Wild (suscep- tible)	College Station	College Station, Tex., 1963	Bioassay, metabolism, nutrition, light attractancy studies.	11
Wild (phos- phate resistant)		Weslaco, Tex. 1969	Toxicological studies.	11
		Tampico, Mexico 1969	do	11

Laboratory	Florence, S. C.	Larval competition and feeding stimulant studies.	27
Inbred	Oxford, N. C. 1965	Radiation studies.	56
Wild, high diapausing	Oxford, N. C. 1960-62	Sterility, attractant, plant resistance, basic biology, ecological, and biological control studies.	66
<u>Heliothis zea (Boddie)</u> - bollworm, corn earworm, tomato fruitworm			
Wild	Tucson, Ariz. 1965	Biological testing. Parasite-predator host-prey.	5
Wild, inbred 65 ₂₁	Stoneville, Miss. 1965	Controlled ecological studies and artificial infestations for various studies.	7
Wild, inbred	Florence, S. C. 1965	Ecological, toxicological, and physiological studies. Field adults added in August 1968.	9
Wild (susceptible)	College Station, Tex. 1963	Bioassay, metabolism, nutrition, light attractancy studies.	11
Laboratory	Nutrilite Products, Inc., 1968	Mass rearing to supply needs of research projects.	27
Wild, inbred	Columbia, Mo. 1964	Biology, biological testing of parasites and predators, sterilization, behavior and plant resistance studies.	36
Wild	Stillwater, Okla. 1962	Artificial diets and sorghum resistance.	39
Wild	Nutrilite Products, Inc. 1966	Biological studies.	52
	Arizona		52

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
	<u>Heliothis zea</u> (Boddie)	- bollworm, corn earworm, tomato fruitworm (cont.)			
		Nutriline Prod., Inc.	Insect pathogen studies.		54
		Nutriline Prod., Inc.	Mass rearing, plant resistance, population density.		66
Wild		Charleston, S. C. 1967	Host plant resistance; pathogen studies.		67
	<u>Laspeyresia pomonella</u> (L.)	- codling moth			
Wild	Vincennes	Vincennes, Ind. 1960	Attractant, biological, and chemical control studies.		18
Inbred	Yakima	Yakima, Wash. 1965	Attractant, biological and chemical control studies plus sterile-male release studies. Reared on apple or artificial media.		23
	<u>Mamestra configurata</u> Walker	- bertha armyworm			
	1	Yakima, Wash. 1965	Insect virus studies.		69
	<u>Manduca sexta</u> (Johannson)	- tobacco hornworm			
Inbred		Number of sources, including some field collected insects, 1964	Physiological and biochemical studies.		55
Inbred		Oxford, N. C. 1967	Diapause, physiological, and biochemical studies.		56
Wild	NC	North Carolina and others 1965	Sterility, attractants, basic biology, parasites, predators, ecological.		66

Wild	CX	St. Croix, V.I. 1967	do	66
Wild		Florence, S. C.	Mass rearing, biological studies.	68
Wild	CX	St. Croix, V.I. 1966	Mass rearing, biological and ecological studies.	70
<u>Ostrinia nubilalis</u> (Hubner) - European corn borer				
Wild	CR	Ankeny, Iowa 1963	Pathology, insecticide, sex pheromone, and male-sterile studies.	30
Wild	WG	Ankeny, Iowa 1966		30
Wild	A) B) C) D) E)	Ankeny, Iowa 1968	Studies on diapause and disease susceptibility.	30
Wild		Boone Co., Iowa Autauga Co., Ala. Queen Anne Co., Md. Ottertail Co., Minn. New Madrid Co., Mo. Dawson Co., Nebr. Lucas Co., Ohio Ontario, Canada Quebec, Canada Tift Co., Ga.	Variation between biotype studies.	30 30 30 30 30 30 30 30 30 30 30
Wild	WF9 CI.31A Oh43	Ankeny, Iowa 1965	Determine ability to adapt to host plant. Reared only on inbred host plant or host plant material.	30
<u>Paralobesia viteana</u> (Clemens) - grape berry moth				
Wild		Northern Ohio	Rearing studies.	21

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Paramyelois transitella</u> (Walker)	- navel orangeworm		
Inbred		Albany, Calif. 1967	Laboratory studies.	71
	<u>Pectinophora gossypiella</u> (Saunders)	- pink bollworm		
		Maricopa Co., Ariz. 1966	Biological, rearing and sterilization studies.	5
Wild		El Paso, Tex. 1965	Laboratory rearing.	10
	<u>Phthorimaea operculella</u> (Zeller)	- potato tuberworm		
		Delaware		52
	<u>Pieris rapae</u> (L.)	- imported cabbageworm		
Wild		Charleston, S. C.	Biological studies.	52
	<u>Platynota stultana</u> (Walsingham)			
		Kennett Square, Pa. 1963	Biology, sterilization, pheromone, and insecticidal studies.	64
	<u>Plodia interpunctella</u> (Hubner)	- Indian meal moth		
		Beltsville, Md. 1956	Insect pathogen studies.	54
		Beltsville, Md. 1956	Reared on artificial media for tests with insect pathogens.	55
Inbred		Fresno, Calif.	Laboratory and field studies.	71
Mutant-white eye		Fresno, Calif. 1967	Laboratory studies.	71

Wild	Modesto, Calif. 1967	Laboratory studies.	72
Wild	Unknown	do	72
Inbred	Tifton, Ga. 1961	do	73
Inbred	Kansas wild strain	Identification and stock source.	74
Wild	Missouri wild strain 1968	Laboratory and field studies.	74
Inbred	Savannah, Ga. 1969	do	74
Inbred	Riverside, Calif. 1969	do	74
<u>Prodenia eridania</u> (Cramer) - southern armyworm			
Wild	Raleigh, N. C. 1956	Insecticide evaluations and sex pheromone studies.	59
<u>Sitotroga cerealella</u> (Olivier) - Angoumois grain moth			
Wild	Vincennes, Ind.	Host eggs for rearing <u>Trichogramma</u> <u>minutum</u> .	18
Inbred	Manhattan, Kans.	Laboratory studies.	31
Inbred	Riverside, Calif. 1967	Biological studies.	52
	Delaware		53
Inbred	Houston, Tex. prior to 1952.	Laboratory studies.	71
Wild	Tifton, Ga. 1962	do	72
Inbred	Tifton, Ga. (wild) 1965	do	73

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Sitotroga cerealella</u> (Olivier) - Angoumois grain moth (cont.)			
Inbred		Kansas wild strain	Identification and stock source.	74
Wild		Beaumont, Tex. 1968	Insecticidal and biological studies.	75
	<u>Spodoptera exigua</u> (Hubner) - beet armyworm			
Wild		Tucson, Ariz. 1964	Biological testing. Parasite-predator host-prey.	5
Virus-free	Laboratory	Brownsville, Tex.	Pheromone studies.	27
Inbred		Mesa, Ariz. 1967	Parasite rearing.	60
Wild		Riverside, Calif. 1967	Biological studies.	61
	<u>Spodoptera frugiperda</u> (J. E. Smith) - fall armyworm			
		Local collection from corn 1964	Host for parasites	10
Non-DDT resistant	Laboratory	Tifton, Ga. 1960	Mass rearing to supply needs of research projects, as well as resistance to DDT studies.	27
Wild		Stillwater, Okla. 1964	Artificial diets and sorghum resistance.	39
		State College, Miss.	Insect pathogen studies.	54
		Insect Pathology Lab. Beltsville, Md. 1969	Evaluation of candidate hormonal agents.	58

Wild	Brownsville, Tex. 1967	Insecticide screening.	59
<u>Synanthedon pictipes</u> (Grote & Robinson) - lesser peach tree borer			
Wild	Vincennes 1964	Sex attractant, biological and chemical control studies.	18
<u>Tineola bisselliella</u> (Hummel) - webbing clothes moth			
Wild	Savannah, Ga. 1962	Laboratory studies.	72
<u>Trichoplusia ni</u> (Hubner) - cabbage looper			
Wild	Tucson, Ariz. 1964	Biological testing. Parasite-predator host-prey.	5
Inbred	Biofirm Div. 1967		10
	Columbia, Mo. 1967	Biology, biological testing of parasites and predators, sterilization, behavior and plant resistance studies.	36
Wild	Riverside, Calif. 1966	Biological studies.	52
	Brownsville, Tex.	Insect pathogen studies.	54
Inbred	Hybrid between Riverside and Wisconsin strains	Radiation, chemosterilant and physiological studies.	56
Yellow mutant	do	do	56
Inbred	Mesa, Ariz. 1964	Sterile releases. Mass rearing. Host parasite studies.	60

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Trichoplusia ni</u> (Hubner)	- cabbage looper (cont.)		
Inbred		Riverside, Calif.		61
Wild		Charleston, S. C.	Insecticide evaluations and insect pathogen studies.	67
	<u>Vogtia malloi</u> Pastrana			
Wild		Buenos Aires, Argentina 1968-69	Biological control of alligatorweed.	51
<u>COLEOPTERA</u>				
	<u>Acanthoscelides obtectus</u> (Say)	- bean weevil		
Inbred		Riverside, Calif. 1965	Laboratory studies.	71
	<u>Agasicles n. sp.</u>			
Inbred		Buenos Aires, thru Jacksonville, Fla.	Biological control of <u>Alternanthera phylloxeroides</u>	51
	<u>Aleochara tristis</u> Gravenhorst			
Wild, inbred	Lincoln, normal	France, 1965	Biological control studies on the face fly.	48
	<u>Alphitobius diaperinus</u> (Panzer)	- lesser mealworm		
		National Zoo, Wash., D.C., 1965	Biological studies	57

Altica carduorum Guerin

Inbred	March 1964	Biological control of Canada thistle <u>Cirsium arvense</u>	51
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Amphimallon majalis (Razoumowsky) - European chafer

Wild	Geneva, N. Y.	Insecticide, pathogen, and sterilization studies. Third-instar larvae collected each fall, held under cold storage, and removed as needed during winter and spring.	20
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Anthonomus eugenii Cano - pepper weevil

Inbred	Riverside, Calif. 1966	Host plant resistance, orientation, and nutrition studies.	61
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Anthonomus grandis Boheman - boll weevil

Wild	Stanfield, Ariz. 1966	Ecological - biological control studies.	5
Wild	Awa Valley, Ariz. 1967	do	5
Wild	Amado, Ariz. 1966	do	5
Wild	Hyder, Ariz. 1967	do	5
Inbred	Castleberry, Ala. 1964	Nutrition and physiology studies	6
Inbred	Clinton, La. 1965	do	6

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
Wild	Texas A&M	Manuel, Tamps, Mexico 1957	Source for all test weevils at laboratory. Fitness (compared to wild type) - has lost ability to diapause.	8
			The following strains derived from the original wild strain above are maintained: <u>Slate-slate yellow</u> , <u>Ebony</u> , <u>Ebony pearl</u> , <u>Yellow pearl</u> , <u>Apricot</u> , <u>Yellow</u> , <u>Bis</u> , <u>Non-bis</u> , <u>Dark from Apricot</u> , and <u>Yellow from Apricot</u> . These strains represent mutant eye and body colors.	8
Wild	Brown Florence boll weevils	Florence, S. C. 1960	Ecological, toxological, biochemical, and physiological studies. Field weevils added to colony August 1968.	9
Pheno-typic selective breeding	Whisnant Black	Florence, S. C. 1964	Ecological and biological studies and field insecticide tests. Strain has red eyes.	9
Wild (susceptible)	College Station	Manuel, Tamps, Mexico 1957	Bioassay, metabolism, and nutrition studies.	11
Laboratory selected phosphate resistant	MCP	Baton Rouge, La. 1967	Toxicological studies.	11
Inbred		College Station, Texas, 1964	Chemosterilant and radiation studies.	56
<u>Anthrenomus grandis thurberiae</u> Pierce - thurberia weevil				
Wild	Black body & natural	Santa Rita Mts. Ariz. 1967	Ecological-genetic studies	5

Anthrenus flavipes LeConte - furniture carpet beetle

Wild	Laboratory studies	72
<u>Araecerus fasciculatus</u> (DeGeer) - coffee bean weevil		
Inbred	Tifton, Ga. (wild) 1966	73
Inbred	Tifton, Ga. (wild) do	74
<u>Attagenus megatoma</u> (F.) - black carpet beetle		
Inbred	Washington, D. C.	57
Inbred	Madison, Wisc. prior to 1956	71
Wild	Pesticide evaluations and laboratory studies.	72
Inbred	Kansas wild strain	74
Inbred	Madison, Wisc. prior to 1956	77
<u>Callosobruchus maculatus</u> (F.) - cowpea weevil		
Inbred	Riverside, Calif. 1965	71
Inbred	Fresno, Calif. 1966 do	72
<u>Carpophilus dimidiatus</u> (F.) - corn sap beetle		
Wild	Savannah, Ga. 1968 do	71

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Carpophilus freemani</u> Dobson			
Inbred		Fresno, Calif. 1966	Laboratory studies	71
	<u>Carpophilus hemipterus</u> (L.) - dried-fruit beetle			
Inbred		Fresno, Calif. 1955	do	71
	<u>Carpophilus humeralis</u> (F.) - pineapple beetle			
Inbred		Fresno, Calif. 1965	do	71
	<u>Carpophilus mutilatus</u> Erichson			
Inbred		Fresno, Calif. 1966	do	71
	<u>Carpophilus obsoletus</u> Erichson			
Inbred		Fresno, Calif. 1966	do	71
	<u>Cathartus quadricollis</u> (Guerin-Meneville) - square necked grain beetle			
Wild		Unknown, 1966	Laboratory studies	72
Inbred		Tifton, Ga. (wild) - 1967	do	73
	<u>Coccinella septempunctata</u> L.			
		France 1965	Predation studies	63

<u>Coccinella transversoguttata</u> Faldermann - transverse lady beetle	
Native, wild	63
Presque Isle, Me. 1965	Predation studies
<u>Conoderus falli</u> Lane - southern potato wireworm	
Wild	67
Charleston, S. C. Field collected.	Insecticide evaluations (Colony maintained during summer and fall only.)
<u>Conotrachelus nenuphar</u> (Herbst) - plum curculio	
Inbred Georgia	16
Ft. Valley, Ga. 1960	Ecology, biology, radiation, and artificial diet.
Wild	18
Vincennes, Ind.	Life history and control studies
<u>Cryptolestes pusillus</u> (Schonherr) - flat grain beetle	
Inbred	72
Tifton, Ga. 1968	Laboratory studies
Inbred	73
Tifton, Ga. (wild 1963	do
Inbred	74
Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.
<u>Cynaues angustus</u> (LeConte) - larger black flour beetle	
Inbred	74
Tifton, Ga.	Identification and stock source.
<u>Dermestes maculatus</u> DeGeer - hide beetle	
Inbred	72
Madison, Wisc. 1967	Identification and stock source.
Illinois, 1967	77
	Laboratory studies.

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Diabrotica balteata</u>	LeConte	- banded cucumber beetle		
		Charleston, S. C.	Insecticide evaluations, insect pathogen, plant resistance, pheromone, and chemo- sterilant studies.	67
	Melanistic	Charleston, S. C.	Biological studies	67
<u>Diabrotica undecimpunctata</u>	<u>howardi</u>	Barber - southern corn rootworm, spotted cucumber beetle		
		American Cyanamid Co. Princeton, N.J. 1968	Substitute test insect for Japanese beetle - insecticide studies.	19
Wild, inbred		Brookings, S. D. Fall 1964	Insecticide studies	40
Wild, inbred		Brookings, S. D. field collected 1964-65	Test animal, insect pathology, and nutrition of <u>Diabrotica</u> spp.	40
<u>Diabrotica virgifera</u>	LeConte	- western corn rootworm		
		Spearfish, S. D.	Antibiosis testing, basic studies on attractants and feeding. Adults collected annually in field.	40
<u>Eleodes suturalis</u>	(Say)	- a false wireworm		
Wild	1	Western S. D.		40
<u>Embaphion muricatum</u>	Say	- a false wireworm		
Wild	1	Western S. D.		40

<u>Epilachna borealis</u> (F.) - squash beetle	Alabama	53
<u>Epilachna varivestis</u> Mulsant - Mexican bean beetle		
	New Jersey	53
	Field collection 1962	64
	Host for parasite production	
<u>Gnathocerus maxillosus</u> (F.) - slender horned flour beetle		
Inbred	Tifton, Ga. (wild) 1965	73
	Laboratory studies	
Inbred	Tifton, Ga. (wild) 1965	74
	do	
<u>Graphognathus peregrinus</u> (Buchanan) - a white fringed beetle		
	Field collection 1969	34
	Insecticide and chemosterilant tests, resistance studies.	
<u>Haptoncus luteolus</u> (Erichson)		
Inbred	Fresno, Calif. 1966	71
	Laboratory studies	
<u>Hypera postica</u> (Gyllenhal) - alfalfa weevil		
Wild	Beltsville, Md. 1967	32
	Insecticide and plant resistance studies.	
Wild	First generation lab-reared adults (1969)	32
	Insecticide and plant resistance studies.	
	N. J. and Pa.	53
	Host for parasite production.	

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Lasioderma serricorne</u> (F.) - cigarette beetle			
Inbred		Richmond, Va. 1965	Laboratory studies.	71
Wild		Unknown	do	72
Inbred			Pesticide evaluations	76
Inbred		Richmond, Va. 1967	Laboratory studies	77
	<u>Latheticus oryzae</u> (Waterhouse) - long headed flour beetle			
Wild		Estill, S. C. 1967	Laboratory studies	72
Inbred		Tifton, Ga. (wild) 1963	do	73
Inbred		Kansas wild strain	Identification and stock source.	74
	<u>Lema trilineata</u> (Olivier) - three-lined potato beetle			
		New Jersey		53
	<u>Longitarsus jacobaeae</u> (Waterhouse)			
Inbred		Rome, Italy	Biological control of tansy ragwort	51
Inbred		Delemont, Switzerland	do	51
	<u>Lophocateres pusillus</u> (Klug) - Siamese grain beetle			
Inbred		Kansas wild strain	Laboratory studies.	74

<u>Oryzaephilus mercator</u> (Fauvel) - merchant grain beetle			
Inbred	Fresno, Calif. 1963	Laboratory studies	71
Wild	Fresno, Calif. 1967	do	71
Wild	Unknown	do	72
Inbred	Tifton, Ga. (wild) 1964	do	73
Inbred	Savannah, Ga.	do	74
<u>Oryzaephilus surinamensis</u> (L.) - saw-toothed grain beetle			
Inbred	Fresno, Calif.	Laboratory studies	71
Wild	Fresno, Calif. 1967	do	71
Wild	Manhattan, Kans. 1964	do	72
Inbred	Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
<u>Oulema melanopus</u> (L.) - cereal leaf beetle			
Wild	Berrien Co., Mich.	Research on host plant resistance, parasites, physiology, etc.	33
Inbred			33
<u>Palorus ratzeburgi</u> (Wissmann) - small-eyed flour beetle			
Inbred	Kansas wild strain	Identification and stock source.	74
<u>Popillia japonica</u> Newman - Japanese beetle			
Wild	Moorestown, N. J. 1967	Research on biology and control.	19

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Rhyzopertha dominica</u> (F.) - lesser grain borer				
Inbred		Houston, Tex. prior to 1962	Laboratory and field studies.	71
Wild		Unknown	Laboratory studies	72
Inbred		Tifton, Ga. (wild) 1963	do	73
Inbred		Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
Inbred		Manhattan, Kans. (wild) 1968	Insecticidal and biological studies	75
Wild		Beaumont, Tex. 1968	do	75
<u>Sitona cylindricollis</u> Fahraeus - sweetclover weevil				
Wild		Nebraska - collected annually, held over-winter	Screening for host plant resistance and other studies concerning host selection and host resistance.	38
<u>Sitophilus granarius</u> (L.) - granary weevil				
Inbred		Manhattan, Kans. 1966	Laboratory studies	72
Inbred		Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
<u>Sitophilus oryzae</u> (L.) - rice weevil				
Inbred		Houston, Tex. prior to 1962	Laboratory studies	71

Inbred	U. of Ark. 1961 U. of Calif. 1961 Kans. St. Univ. 1961 LSU, 1961 Minneapolis, Minn. 1961 Houston, Tex. 1961	Laboratory studies do do do do do	72 72 72 72 72 72
Inbred	Kansas wild strain 1961	do	73
Inbred	Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
Inbred	Manhattan, Kans. (wild) 1968	Insecticidal and biological studies	75
Wild	Beaumont, Tex. 1968	do	75
<u>Sitophilus zeamais</u> Motschulsky			
Wild	Estill, S. C. 1961	Laboratory studies	72
Inbred	Tifton, Ga. (wild) 1961	do	73
Inbred	Tifton, Ga. (wild) 1965	do	74
<u>Stelidota geminata</u> (Say)			
Wild	Rio Grande Co., Texas 1968	do	71
<u>Tenebrio molitor</u> L. - yellow mealworm			
Inbred	Commercial source 1969	Juvenile hormone bioassay.	58
Inbred	Manhattan, Kans. 1965	Laboratory studies	72

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Tenebrio molitor</u> L. - yellow mealworm (cont.)				
Inbred		Kansas wild strain 1963	Identification and stock source	73
Inbred		Kansas wild strain	Laboratory studies	74
<u>Tenebrio obscurus</u> F. - dark mealworm				
Inbred		Manhattan, Kans. 1965	Laboratory studies	72
Inbred		Kansas wild strain	Identification and stock source	74
<u>Tenebroides mauritanicus</u> (L.) - cadelle				
Inbred		Savannah, Ga. 1967 Manhattan, Kans. 1967	Laboratory studies	71
Wild		Canada 1960	do	72
Inbred		Manhattan, Kans.	do	74
<u>Tribolium castaneum</u> (Herbst) - red flour beetle				
Inbred		Fresno, Calif.	do	71
Wild		Unknown	do	72
IR	Ga. Peanut-1 (GP-1)	Tifton, Ga. 1962	Insecticide resistance studies, malathion resistant strain	72
IR	Ga. Peanut-4 (GP-4)	Columbus, Ga. 1964	do	72
I-T	Savannah lab-selected	Savannah, Ga. Insectary	do malathion tolerant strain	72

Mutant	Black	Savannah, Ga. 1966	Laboratory studies	72
Inbred	Lab strain	Tifton, Ga. 1961	do	73
Wild	J. H. Daniels	Farm Obrien, Fla. 1962	do	73
Wild	GK-Tif	Peanut warehouse, Tifton, Ga. 1962	Insecticide resistance studies	73
Wild		Ames, Iowa 1966	Insecticidal and biological studies	75
Wild	TH-Col	Peanut Silo, Columbus, Ga. 1964	Insecticide resistance studies	73
Wild	AOM-Arl	Peanut warehouse Arlington, Ga. 1964	do	73
Wild	SI-Daw	Peanut warehouse, Dawson, Ga. 1964	do	73
Wild	Arn-Tif	Corn mill, Tifton, Ga. 1965	Laboratory studies	73
Inbred		Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies	74
Wild		Madison, Wisc. 1965	Laboratory studies	77
<u>Tribolium confusum</u> Jacquelin duVal - confused flour beetle				
Inbred		Stored Product Insect Lab., Savannah, Ga. 1964	Nutritional, physiological, biochemical	55
Inbred		Fresno, Calif. no. of years	Laboratory studies	71
Wild		Manhattan, Kans. 1960	do	72
Mutant	Black	Savannah, Ga. 1967	do	72

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Tribolium confusum</u>	Jacquelin duVal - confused flour beetle (cont.)		
Inbred		Savannah, Ga. 1961	Laboratory studies	73
Inbred		Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
Inbred		Manhattan, Kans. (wild) 1968	Insecticidal and biological studies.	75
	<u>Tribolium madens</u>	(Charpentier) - black flour beetle		
Wild		Millard Co., Utah	Depredator in nests of leaf-cutting bees. Feed on pollen or dead insects.	3
Inbred		Tifton, Ga.	Stock source.	72
Inbred		Tifton, Ga.	Identification and stock source.	74
	<u>Trogoderma glabrum</u>	(Herbst)		
Inbred		Madison, Wisc. 1959	Laboratory studies	71
Inbred		Madison, Wisc. 1967	do	72
Inbred		Madison, Wisc. 1959	do	77
	<u>Trogoderma grassmani</u>	Beal		
Inbred		Riverside, Calif. 1966	do	71
Inbred		Riverside, Calif. 1966	do	77

Trogoderma inclusum LeConte

	Beltsville, Md. 1967	Biological studies	57
Inbred	Madison, Wisc. prior to 1956	Laboratory studies	71
Inbred	Madison, Wisc. 1967	do	72
Inbred	Kansas wild strain	Bioassays of insecticidal materials and biological-ecological studies.	74
Inbred	Madison, Wisc. prior to 1956	Laboratory studies	77

Trogoderma ornatum (Say)

Inbred	Riverside, Calif. 1966	do	71
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Trogoderma parabile Beal

Wild	Cache Valley, Utah	Depredator in nests of leaf-cutting bees. Feed on pollen or dead insects.	3
Inbred	Madison, Wisc. prior to 1960	Laboratory studies	71
Inbred	Fresno, Calif. 1966	do	72
Inbred	Madison, Wisc. prior to 1960	do	77

Trogoderma simplex Jayne

Inbred	Sacramento, Calif. 1966	do	71
Inbred	do	do	77

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Trogoderma sternale</u> Jayne			
Inbred		Delano, Calif. 1966	Laboratory studies	71
Inbred		do	do	77
			<u>HYMENOPTERA</u>	
	<u>Anaphes flavipes</u> (Foerster)			
Wild		Purdue Univ. 1965	Reared for field release and research studies.	33
	<u>Apanteles rubecula</u> Marshall			
Wild		British Columbia 1967	Biological control studies	52
	<u>Aphelinus asychis</u> Walker			
		France 1969	Colonization and biological control of greenbugs studies.	39
	<u>Aphelinus varipes</u> (Foerster)			
		France 1969	do	39
		France	Biological control studies	52
		France	do	53
	<u>Aphidius smithi</u> Sharma & Subba Rao			
	1	Yakima, Wash. 1966	Biological control	69

Apis mellifera L. - honey bee

Inbred	APCH	1962	High alfalfa pollen collecting selection	1
Inbred	APCL	1962	Low alfalfa pollen collecting selection	1
Inbred	Ca	1963	Caucasian Race selection	1
Inbred	AN	1963	Anatolian Race selection	1
Inbred	Gk	1963	Greek Race selection	1
Inbred	YD	Long term	Yellow Italian - heterozygous Cordovan	2
Inbred	YR	Long term	do	2
Inbred	LM	Long term	do	2
Inbred	HB	Long term	Black selection	2
Inbred	Ka	Europe 1963	Carniolan Race selection	2
Inbred	Kb	Europe 1966	do	2
Inbred	Kc	Europe 1966	do	2
Inbred	Gk	Europe 1966	Greek Race selection	2
Inbred	Gc	Europe 1966	Greek heterozygous Cordovan	2
Inbred	Ca	Europe 1963	Caucasian race selection	2
Inbred	An	Europe 1963	Anatolian race selection	2
Inbred	We	California 1965	Black German Race	2
Inbred	RR	Romania 1966	Carpathian Race selection	2
Inbred	Ro	Romania 1966	do	2
Inbred	Pa	California 1966	Italian Race selection	2

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Apis mellifera</u> L. - honey bee (cont.)				
Inbred	Pb	California 1966	Italian Race selection	2
	KG	1967	Hybrid selection (Carniolan X Greek)	2
	Me	Louisiana 1969	Italian selection	2
	CR	1967	Hybrid Selection (Cauc. X Carn.)	2
	High APC	Cache Valley, Utah	High alfalfa pollen collecting selection	3
	Low APC	Cache Valley, Utah	Low alfalfa pollen collecting selection	3
	Line B	Cache Valley, Utah	Selected from commercial bees for alfalfa for alfalfa pollen collection	3
Hybrid of Line B	High APC	Cache Valley, Utah	Collects alfalfa pollen to high degree, somewhat higher egg viability than inbred types.	3
The above strains from the Cache Valley, Utah are maintained and improved by artificial insemination performed by Apiculture laboratory at Baton Rouge, La.				
Inbred cordovan	A	General selection 1954-Gafford Cauc., Short & others	Can be used in hybrid combination, inbreeding coefficient 0.25 in 1964, combines well in hybrid stock.	4
Inbred, wild	B	Gafford Caucasian 1955, Ala.	In hybrid combination for productive hybrid stock, excellent inbreeding coefficient 0.843 in 1964, will uncap AFB brood prolificness.	4
Inbred, wild	D	Dymant queens from Guelph 9/57 (All produced over 300 lb)	In hybrid combination for productive hybrid stock, inbreeding coefficient 0.359 in 1964, nonpropolizer, temperamental.	4

Inbred G cordovan and wild type	1964 Greek	Possible use in hybrid combination, will remove AFB brood.	4
Inbred H Caucasian	1964-Colorado Holzberlein Hastings Cau. stock	Possible use in a Caucasian hybrid typical black Caucasian.	4
Inbred M Cordovan	Gafford & Moore 1946	In hybrid combination for highly produc- tive stock, excellent inbreeding coeff. 0.899 in 1964, will uncap AFB brood. Prolificness.	4
Inbred, X wild	1954	In hybrid combination for highly produc- tive stock, inbreeding coefficient 0.8759 in 1964, sacbrood susceptible carries temper.	4
Inbred, Z wild	Polar, Wis. Chamberlin Gafford stock	In hybrid combination for highly produc- tive stock, inbreeding coefficient 0.852 to 0.861 in 1964, EFB susceptible. Good overwintering.	4
<u>Bathyplectes anura</u> (Thomson)	Field collected annually and held over winter	Release for control of the alfalfa weevil.	53
<u>Bathyplectes curculionis</u> (Thomson)	do	do	53
<u>Bracon kirkpatricki</u> (Wilkinson)	State College, Miss. 1968	Studies on biological control of pink bollworm.	5
Wild Kenya	Kenya	Studies in biological control of boll weevil.	8

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Bracon mellitor</u> Say				
Wild	Miss.	Several localities in Miss.	Studies in biological control of boll weevil.	8
<u>Bracon</u> sp.				
Wild		Tucson, Ariz. 1968	Studies on biological control of pink bollworm.	5
<u>Bruchophagus roddi</u> (Gussakovsky) - alfalfa seed chalcid				
<u>Campoletis perdistinctus</u> (Viereck)				
Wild	1	Brownsville, Tex. 1966 field collection	Studies on parasitism of <u>Heliothis</u> spp.	10
Wild	1	Brownsville, Tex. 1966 field collection	Studies on oviposition behavior.	11
		Brownsville, Tex.	Biological control studies.	52
<u>Ceratina (Pithitis) smaragdula</u> (Fabricius)				
Imported from India	Utah		Alfalfa pollinator. Nests in stems of pithy-stemmed plants.	3
<u>Copidosoma truncatellum</u> (Dalman) - an egg-larval parasite of <u>Trichoplusia ni</u> (Hubner)				
Wild		Columbia, Mo. 1966	Biological studies.	52

<u>Diaretiella rapae</u> (M'Intosh)				
Wild	Columbia, Mo. 1966	Biological studies.		52
<u>Eriborus</u> sp.				
Wild	CIBC Bangalore, India 1968	Biological control studies with <u>Heliothis</u> spp.		5
<u>Heterolaccus grandis</u> Burks				
Wild	Iguala, Mexico 1967	Studies in biological control of boll weevil.		8
<u>Macrocentrus ancyllivorus</u> Rohwer				
	New Jersey			53
<u>Megachile rotundata</u> (F.)				
Wild	Utah	Alfalfa pollinator		3
<u>Microplitis croceipes</u> (Cresson)				
Wild	Tucson, Ariz. 1967	Biological control studies with <u>Heliothis</u> spp.		5
<u>Microterys flavus</u> (Howard)				
Wild	Weslaco, Tex. 1968	Studies of biological control of <u>Coccus hesperidum</u> .		22

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Nomia melanderi</u> Cockerell - alkali bee			
Wild		Utah	Alfalfa pollinator. Special handling - requires sunny weather, protection from rain, special nesting soils.	3
	<u>Pediobius foveolatus</u> (Crawford)			
		India		53
	<u>Praon simulans</u> (Provancher)			
	1	Walla Walla, Wash. 1965	Propagation studies	69
	<u>Pteromalus puparum</u> (L.)			
Wild uniparental		Columbia, Mo. 1966	Biological studies	52
Wild biparental		Columbia, Mo. 1966	do	52
	<u>Trichogramma brasiliense</u> (Ashmead)			
		California 1967	do	52
	<u>Trichogramma cacoeciae</u> Marchal			
		California 1967	do	52
	<u>Trichogramma euproctidis</u> (Girault)			
		California 1967	do	52

Trichogramma evanescens Westwood

Poland 1966	do	52
France 1966	do	52
Czechoslovakia 1968	do	52

Trichogramma fasciatum (Perkins)

Mexico 1967	do	52
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Trichogramma minutum Riley

Wild pretiosum Flanders	Coolidge, Ariz. 1967	Biological control of lepidopterous cotton pests	5
Wild Vincennes	Vincennes, Ind. 1965	Biological and integrated control studies	18
	California 1967	Biological control studies	52
	Illinois 1967	do	52

Trichogramma pretiosum Riley

Arizona 1968	do	52
California 1967	do	52
Mexico	do	52

Trichogramma semifumatum (Perkins)

California 1967	do	52
Brownsville, Tex.	do	52

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Trichogramma</u> sp.				
		Michigan 1967	Biological control studies	52
		Texas 1967	do	52
		Victoria, Mexico	do	52
<u>Trichogrammatoidea nana</u> (Zehntner)				
		India 1968	do	52
<u>Aedes aegypti</u> (L.) - yellow-fever mosquito				
<u>DIPTERA</u>				
		Colonized from wild stock, Orlando, Fla. 1939		43
Inbred				
Chemo-sterilant resistant	Apholate resistant	Gainesville, Fla. 1963	Mechanism of resistance to chemo-sterilants. Selection with apholate.	43
Mutant inbred	Red eye	Notre Dame	Marker strain, eyes are red.	43
Mutant inbred	WaSDs	Notre Dame	Marker strain, wart palp in males expressed as bulb on apical end of 2nd segment, swollen to form a short club; in male there are no white scales on the lateral tergites of abdomen; in female the lateral spots are enlarged. Dark scutum in both sexes.	43
Inbred		Vero Beach, Fla.	Pathogen studies	44

<u>Aedes sierrensis</u> (Ludlow) - western tree-hole mosquito			
Inbred	Fresno, Calif.	Pathogen studies	44
<u>Aedes taeniorhynchus</u> (Wiedemann)			
Inbred	Orlando, Fla. from wild stock		43
Inbred	Regular	Lake Charles, La.	44
<u>Aedes tormentor</u> Dyar & Knab			
Inbred	Regular	Lake Charles, La.	44
<u>Aedes triseriatus</u> (Say)			
Inbred	Regular	Gainesville, Fla.	44
Inbred	Regular	Lake Charles, La.	44
<u>Anastrepha suspensa</u> (Loew)			
	Orlando & Miami, Fla.	Biology, behavior, lure, insecticide, bait spray development, mass pro- duction, sterile fly release methods, integration of eradication methods.	14
<u>Anopheles quadrimaculatus</u> Say - common malaria mosquito			
Inbred	Gainesville	Mixture from colonies established at various points in U. S.	43
Inbred	Hartwell Dam	Hartwell, Ga. 1962	43
		DDT resistance studies	

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Carcelia illota</u> (Curran)				
Wild		CIBC Bangalore, India 1967	Biological control studies with <u>Heliothis</u> spp.	5
<u>Ceratitis capitata</u> (Wiedemann) - Mediterranean fruit fly				
Wild, adapted to lab culture		Kona & Kula areas of Hawaii, 1958	Studies on nutrition, behavior, screening of lures, toxicants, chemosterilants, repellents, commodity treatments and sterile release method.	17
<u>Cochliomyia hominivorax</u> (Coquerel) - screw-worm				
Mutant inbred	Srs	Mission, Tex. 1963	Starvation resistant	50
Mutant inbred	Spw		Genetic marker, speckled wings	50
Wild	Fla	Florida 1954	Sterile-male release	50
Wild	Mex	Mexico 1965	do	50
Wild	Cotaxtla	Vera Cruz, Mex. 1968	Biological and behavioral studies	50
Wild	PR	Puerto Rico, 1968	do	50
Mutant	CITXye	Vera Cruz, Mex. 1968	Genetic marker (eye color mutant)	50
<u>Cochliomyia macellaria</u> (F.) - secondary screw-worm				
Wild, inbred		Kerrville, Tex. 1962	Insecticide trials	49
Wild		Kerrville, Tex. 1962	Radiation and physiological studies	56

Culex peccator Dyar & Knab

Inbred Regular Lake Charles, La. 1968 Pathogen studies 44

Culex pipiens pipiens L. - northern house mosquito

DDT Sweet Home Sweet Home, Ore. 1965 Insecticide and biological studies 41
susc.

DDT Eugene Eugene, Ore. 1966 do 41
resist.

Culex pipiens quinquefasciatus Say - southern house mosquito

Inbred Gainesville Gainesville, Fla. 1965 Chemosterilant and insecticide tests 43

Inbred Regular Lake Charles, La. Bacterial studies 44

BVC Bureau Vector Control Pheromone studies 41
Fresno, Calif.
Feb. 1969

Culex salinarius Coquillett

Inbred Regular Lake Charles, La. Microsporidian studies 44

Inbred Thelohania Lake Charles, La. Pathogen studies 44
infected

Culex tarsalis Coquillett

Inbred Regular Fresno, Calif. Pathogen studies 44

Culex territans Walker

Inbred Regular Lake Charles, La. Pathogen studies 44
1968

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
<u>Culicoides variipennis</u>	<u>sonorensis</u>	Wirth and Jones		
	Sonora	Sonora, Tex. 1957	Arbovirus disease transmission research	42
<u>Culiseta inornata</u>	(Williston)			
Inbred	Regular	Lake Charles, La.	Parasite studies	44
<u>Dacus cucurbitae</u>	Coquillett	- melon fly		
Wild	Standard	Honolulu, 1957	Sterile fly releases, field movement, behavior	17
Inbred	M vein extension	Honolulu, 1967	Dark color, M cross vein extends toward leading edge. Same percentage of males and females marked.	17
<u>Dacus dorsalis</u>	Hendel	- oriental fruit fly		
Inbred	White	Honolulu, 1961	Studies of behavior, nutrition, toxicology, commodity treatments and sterile fly releases; white thoracic markings instead of yellow; recessive; visible in 0.5 to 2.0% of wild flies.	17
Inbred	sooty-legged white	Honolulu, 1967	Purified. Antennae and legs dark instead of orange. Thoracic marks white, as in lab strain.	17
Inbred	sooty-legged yellow	Honolulu, 1967	Purified. Antennae and legs dark instead of orange. Thoracic marks yellow, as in wild strain.	17

Drosophila melanogaster Meigen

Insecticide 6-A Univ. of Arkansas 26
cicide 1957
susceptible

Insecticide residue, chemosterilant
studies, radiation studies. 64

Drosophila sp.

Mixed Fresno, Calif. 1965 71
Laboratory and field studies.

Eucelatoria armigera (Coquillett)

Wild Tucson, Ariz. 5
1965-66
Parasitism studies with Heliothis sp.

Eucelatoria sp.

Wild Oahu, Hawaii, 1969 5
do

Exorista mella (Walker)

Wild Casa Grande, 5
Safford, Ariz.
1965
Parasitism studies with salt-marsh
caterpillar.

Fannia canicularis (L.) - little house fly

Hanson 41
Poultry Corvallis, Oregon
Summer 1962
Rearing studies, insecticides, chemo-
sterilants, pathogens, flight range,
behavior, radiation, genetics studies.
(At the time the flies were collected and
colonized they had developed a rather high
level of resistance to some of the chlorinated
hydrocarbons including heptachlor and DDT.)

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY MAINTAINING COLONY
	<u>Haematobia irritans</u> (L.) - horn fly			
Wild, inbred	Colony	Kerrville, Tex. 1961	Insecticide trials	49
Ronnel resistant	Ron-L	Louisiana, 1963	Insecticide trials	49
Wild		Kerrville, Tex. 1967	Biological studies	52
	<u>Leschenaultia adusta</u> (Loew)			
Wild		Casa Grande, Ariz. 1965	Parasitism studies	5
	<u>Lespesia archippivora</u> (Riley)			
Wild		Tucson, Ariz. 1966	do	5
	<u>Liriomyza munda</u> Frick			
		Charleston, S. C. 1965	Biological and insecticidal studies	64
	<u>Mayetiola destructor</u> (Say) - Hessian fly			
Inbred	Race A	Original field population Purdue Univ.	Genetic studies, determining sources of resistance, locate genes for resistance, evaluate wheats for resistance. Description: Ability to survive on wheats having no genes for resistance. Will die on wheats having the H ₃ , H ₅ , and H ₆ genes for resistance.	28

Inbred	Race B	Purdue Univ., 1943	Description: Will survive on all wheats having no genes for resistance and those wheats having the H_3 genes for resistance. Will die on wheats having the H_5 and H_6 genes.	28
Inbred	Race C	Purdue Univ., 1953	Description: Will survive on all wheats having no specific genes for resistance and those wheats having the H_6 genes for resistance. Will die on wheats having the H_3 and H_5 genes.	28
Inbred	Race D	Purdue Univ., 1954	Description: Will survive on all wheats having no specific genes for resistance and those wheats having the H_3 and H_6 genes for resistance. Will die on wheats having the H_5 gene for resistance.	28
Inbred	Race E	Isolated from a field population collected in Georgia, 1967	Description: Similar to Race B in that it will live on wheats having the H_3 gene for resistance, but differs from Race B in that it is unable to live on Seneca and Vermillion, which are susceptible to Race B.	28
Inbred	Great Plains Race	Original field population collected in Rooks County, Kansas 1966	Description: Will survive only on hard red winter wheats having no genes for resistance. Will die on wheats having H_1 , H_2 , H_3 , H_5 , and H_6 genes for resistance.	28

Musca autumnalis DeGeer - face fly

Wild, inbred		Beltsville, Md. 1964	Light attraction, electrocution, and physiology studies. Field dispersion and distribution studies.	46
		Beltsville, Md. 1965	Wild flies were added to colony in attempt to reduce inbreeding of unnatural tendencies.	46

STRAIN TYPE	STRAIN NAME OR NUMBER	PLACE & DATE OF ORIGIN	USE AND OTHER INFORMATION	LABORATORY	
				MAINTAINING COLONY	
<u>Musca autumnalis</u> DeGeer - face fly (cont.)					
	Wild, inbred normal	Lincoln, Nebr. 1963	Biology and biological control studies	48	
	Inbred suscep- tible	Beltsville Maryland, 1960	Insecticide and biological studies	57	
<u>Musca domestica</u> L. - house fly					
		Kerrville, Tex. 1963		10	
	Orlando Regular	Orlando, Fla.	Pheromone studies	41	
	Insecti- cide susceptible	Orlando, Fla. 1943	Standard baseline strain	43	
	I-R No. 1 (DDT)	Orlando, Fla. 1946	Studies on development of insecticide resistance, adults continuously exposed to DDT residue.	43	
	I-R (DDT- Co-Ral- parathion)	Orlando, Fla. 1959	Standard insecticide resistant strain, adults continuously exposed to DDT- CoRai residue, also parathion residue.	43	
	I-R (malathion)	Orlando, Fla. 1956	Studies on development of malathion resistance, adults continuously exposed to malathion residue.	43	
	Chemo- sterilant (apholate)	Orlando, Fla. 1962	Studies on the development of resistance to chemosterilants, adults fed diet treated with apholate.	43	

I-R (CoRal)	Bayer 21/199	Orlando, Fla. 1956	Studies on the development of CoRal resistance, adults continuously exposed to CoRal residues.	43
Wild, inbred		Beltsville, Md. 1963	Light attraction, electrocution, and physiology studies. Field studies on dispersion and distribution. Wild flies were added to colony in 1965 in attempt to reduce inbreeding of unnatural tendencies.	46
Wild, diazinon resistant		Beltsville, Md. 1968	Colony started from wild flies collected at ARC dairy manure dump. Area treated with diazinon for 3 fly seasons. Colony used to evaluate larvicides in cow feces.	46
Wild, inbred		Lincoln, Nebr. 1968	Insecticide evaluations and attractant studies.	48
Suscep- tible inbred	NAJDM-1948	Mixture of many strains (CSMA) 1948	Insecticide and chemosterilant evaluations. Formaldehyde used in food from 1948-58.	57
do	do	do	Colony being maintained which has never been subjected to formaldehyde.	57
Resistant inbred	F58W 1958	Mixture of 7 strains from military instal- lations in 6 states and Agr. Res. Ctr., Beltsville, Md. 1958	Insecticide testing.	57
Resistant inbred	Fales 1960 mixture	Mixture of 7 strains from military instal- lations in 5 states and Agr. Res. Ctr., Beltsville, Md. 1960	do	57
Resistant inbred	WIQ	Agr. Res. Ctr., Beltsville, Md. 1966	do	57
do	WIR	do	do	57

HOUSE FLY STOCK CENTER

Fargo, N. D. (56)

STOCK LIST -- APRIL 1969

Stock List Lettering System

a --	wild-type stocks	j --	autosome translocation
b --	X chromosome	k --	closed X chromosome
c --	chromosome I	l --	
d --	chromosome II	m --	X or Y chromosome translocation
e --	chromosome III	n --	compound X chromosome
f --	chromosome IV	o --	attached XY chromosome
g --	chromosome V	p --	altered X chromosome
h --	multichromosome stocks	q --	extra Y chromosome
i --	inverted chromosome	r --	deficiencies and duplications
		s --	triploid stocks

Linkage groups (chromosomes) are numbered according to Wagoner's scheme (1967)*.

*Wagoner, D. E. 1967. Linkage Group-Karyotype Correlation in the House Fly Determined by Cytological analysis of X-Ray Induced Translocations. Genetics 57: 729-739.

- a1 Africa -- wild-type; collected in October 1967, Union of South Africa; believed to be Calleva strain.
- a2 Barrett -- wild-type; from single mated female collected in September 1968, at Barrett, Minn.
- a3 Belfield -- wild-type; from single mated female collected in October 1968, at Belfield, N. D.
- a4 Bowhill -- wild-type; collected in May 1968, at Brisbane, Australia.
- a5 Fargo W² -- wild-type; from single female collected in Fargo, Oct. 23, 1964; crossed with single male from wild.
- a6 Mission-L -- wild-type; collected in Mission, Texas, May 4 and 8, 1964.
- a7 Orlando regular -- wild-type; obtained from ENT, ARS, USDA, Gainesville, Florida; (contains a Y-III translocation).
- a8 WHO/IN/Musca domestica -- wild type; standard strain received from WHO Center (wing mutant is present in stock).
- c1 ac,bp -- curly wings (allicurve), black puparium; obtained from Hiroyoshi's laboratory; chromosome I.
- c3 rl/+ -- Rolled wings; dominant, semi-lethal in homozygous form; obtained from Hiroyoshi's laboratory; chromosome I.
- c2 ctc -- countercoiled genitalia; received from Milani's laboratory; chromosome I.
- d1 ar -- aristapedia; isolated from ac; ar; ye at this laboratory, April 1968; chromosome II.
- d2 bu -- Brunette eye color; received from Hiroyoshi's laboratory; chromosome II.
- d3 car,tw -- carnation eye color, twisted front legs (twisted is not completely penetrant); received from Hiroyoshi's laboratory; chromosome II.
- d4 clw -- classic-wing; received from ENT, ARS, USDA, Corvallis, Oregon, January 1968; chromosome II.

- d5 cm¹ -- carmine eye color; received from Hiroyoshi's laboratory, chromosome II.
- d6 cm² -- carmine eye color; received from Hiroyoshi's laboratory, chromosome II.
(contains a Y-III translocation).
- d7 Mk -- masked, eyes reduced, dominant; obtained in this laboratory in the F₁ of a cross of w virgin females X Sc males; chromosome II.
- d8 stw -- stubby wings; received from ENT, ARS, USDA, Corvallis, Oregon; chromosome II
(contains a Y-III translocation).
- e1 bwb -- brown body color; isolated from an Atp; bwb & T(Y-III) stock received from Milani's laboratory crossed with Fargo w²; chromosome III.
- e2 bwb,ge -- brown body color, green eye color; isolated from a green stock, received from the University of Kansas; chromosome III.
- e3 Bx/+ -- Beadex, scalloped wing edges; dominant, lethal in homozygous form; received from Hiroyoshi's laboratory; chromosome III.
- e4 dw -- damaged (vestigial) wings; isolated at this laboratory, spring 1968; chromosome III.
- e5 Iv -- Irregular veins; dominant; received from ENT, ARS, USDA, Corvallis, Oregon; chromosome III.
- e6 Sc -- Scalloped wing edges; dominant; obtained in this laboratory in the F₁ of a cross of Iv virgin females X WHO males; chromosome III.
- e7 pcv,tin -- posterior-crossveinless, resistant to organotin compounds; received from ENT, ARS, USDA, Corvallis, Oregon, January 1968; chromosome III.
- e8 pcv,bwb -- posterior-crossveinless, brown body; synthesized in this laboratory; chromosome III.
- e9 pw -- pointed wing; isolated in this laboratory; chromosome III.
- e10 pw,w -- pointed wing, white eye; synthesized in this laboratory; chromosome III.
- e11 w -- white eye color; obtained from Hiroyoshi's laboratory; chromosome III.
- e12 w⁵ -- white eye color; received from ENT, ARS, USDA, Corvallis, Oregon, January 1968; chromosome III.

- f1 Aw -- airplane wings, wings held out; dominant; poor penetrance in some crosses; received from ENT, ARS, USDA, Corvallis, Oregon, chromosome IV.
- f2 Ba -- bald (hairless) abdomen; dominant; isolated in this laboratory, summer 1968; chromosome IV.
- f3 cyw -- curly wings; received from ENT, ARS, USDA, Corvallis, Oregon, January 1968; chromosome IV.
- f4 Dld, cyw -- dieldrin resistance, curly wings; received from ENT, ARS, USDA, Corvallis, Oregon, January 1968.
- f5 ext -- extended wings; received from Hiroyoshi's laboratory; chromosome IV.
- f6 ye -- yellow eye color; received from Milani's laboratory; chromosome IV.
- g1 Lp/+ -- loop wing vein mutant; dominant, very weak in homozygous form (not completely penetrant); received from Hiroyoshi's laboratory, chromosome V.
- g2 Lp,ocra -- loop wing vein, ocra eye color; synthesized in this laboratory; chromosome V.
- g3 lv -- linked-veins; received from Corvallis, Oregon, January 1968; chromosome V.
- g4 lv,ocra -- linked-veins and ocra eye color; received from Corvallis, Oregon, January 1968; chromosome V.
- g5 bent wing -- received from Corvallis, Oregon, January 1968.
- g6 split eye -- received from Corvallis, Oregon, January 1968.
- g7 dov -- dot vein; received from Corvallis, Oregon, January 1968.
- h1 ac;ar -- curly wings (allicurve), aristapedia; received from Hiroyoshi's laboratory; chromosomes I and II.
- h2 ac;ar;ye -- allicurve; aristapedia; yellow eye color; synthesized in this laboratory; chromosomes I, II and IV.
- h3 ac;ar;ocra -- allicurve; aristapedia; ocra eye color; synthesized in this laboratory; chromosomes I, II and V.

- h4 ac;ar;Mk;ye -- alicurves; aristapedia; Masked eye; dominant; yellow eye color; synthesized in this laboratory; chromosomes I, II and IV.
- h5 ac;ar;w;ext -- alicurves; aristapedia; white eye; extended wings; synthesized in this laboratory; chromosomes I, II, III and IV.
- h6 ac;ar;bwb;ct;ocra -- alicurves; aristapedia; brown body color; cut wing tips; ocra eye color; obtained from Hiroyoshi's laboratory; chromosomes I, II, III, IV, and V.
- h7 acv;cm;clw;bwb;cyw;ocra -- anterior-crossveinless; carmine eye color; classic-wings; brown body color; curly-wings; ocra eye color; received from Corvallis, Oregon, January 1968; chromosomes I, II, III, IV, and V.
- h8 acv;cm;pcv;ext -- anterior-crossveinless; carmine eye color; posterior-crossveinless; extended wings; received from Corvallis, Oregon, January 1968; chromosomes I, II, III and IV.
- h9 av;cm;clw;bwb;ct;ocra -- received from Corvallis, Oregon, January 1968.
- h10 bwb;ocra -- brown body color; ocra eye color; obtained from Milani's laboratory; chromosomes III and V.
- h11 bwb;b(III);rb(IV) -- brown body color, ruby eye color; synthesized in this laboratory; chromosomes III and IV.
- h12 car;ct -- carnation eye color; cut wing tips; synthesized in this laboratory; chromosomes II and IV.
- h13 cm;bwb -- carmine eye color; brown body color; synthesized in this laboratory; chromosomes II and III.
- h14 ctc;stw;ye -- countercoiled genitalia; stubby wings; yellow eye color; synthesized in this laboratory; chromosomes I, II and IV.
- h15 cyw-like; bwb; ocra -- received from Corvallis, Oregon, January 1968.
- h16 dov-like;dld -- received from Corvallis, Oregon, January 1968.
- h17 Mk;bwb -- Masked, eyes reduced, dominant; brown body color; synthesized in this laboratory; chromosomes II and III.

h18 rb(III);rb(IV) -- ruby eye color; obtained from Hiroyoshi's laboratory (shown at this laboratory to have two recessive loci on two chromosomes necessary for expression); chromosomes III and IV.

h19 rl;ar;ye -- rolled wings, dominant; aristapedia; yellow eye color; synthesized in this laboratory; chromosomes I, II and IV.

h20 rl;bwb;ocra -- rolled wings, dominant; brown body; ocra; synthesized in this laboratory; chromosomes I, III and V.

The following translocation stocks were obtained in irradiation experiments at this laboratory. They represent translocations involving chromosomes I through V.

j1 ac;ar;ye and T(I-II) -- containing a translocation between chromosomes I and II; chromosomes I, II and IV.

j2 ac;ar;ye and T(I-II) --

j3 rl/+;bwb;ocra and T(I-III) -- containing a translocation between chromosomes I and III; chromosomes I, III and V.

j4 rl/+;bwb;ocra and T(I-III) --

j5 ac;ar;ye and T(I-IV) -- containing a translocation between chromosomes I and IV; chromosomes I, II and IV.

j6 ac;ar;ye and T(I-IV) --

j7 rl/+;bwb;ocra and T(I-V) -- containing a translocation between chromosomes I and V, chromosomes I, III and V.

j8 rl/+;bwb;ocra and T(I-V) --

j9 cm;bwb; and T(II-III) -- containing a translocation between chromosomes II and III; chromosomes II and III.

j10 cm;bwb and T(II-III) --

j11 car;ct and T(II-IV) -- containing a translocation between chromosomes II and IV; chromosomes II and IV.

- j12 car;ct and T(II-IV) --
- j13 ac;ar;ye and T(II-IV) -- containing a translocation between chromosomes II and IV;
chromosomes I, II and IV.
- j14 ac;ar;ye and T(II-IV) --
- j15 bw;b;ocra and T(III-V) -- containing a translocation between chromosomes III and V;
chromosomes III and V.
- j16 bw;b;ocra and T(III-V) --
- j17 bw;b;ocra and T(III-V) --
- j18 bw;b;ocra and T(III-V) --
- j19 bw;b;ocra and T(III-V) --
- j20 Iv,bw;b;ocra and T(III-V) -- containing a translocation between chromosomes III and V;
chromosomes III and V.
- j21 bw;b;ocra and T(III-V) --
- j22 bw;b;ocra and T(III-V) --
- j23 Iv,bw;b;ocra and T(III-V) --
- j24 bw;b;ocra and T(III-V) --
- j25 bw;b;ocra and T(III-V) --
- j26 Iv,bw;b;ocra and T(III-V) --
- j27 bw;b;ocra and T(III-V) --
- j28 bw;b;ocra and T(III-V) --
thru
j31
- j32 Iv,bw;b;ocra and T(III-V) --
- j33 bw;b;ocra and T(III-V) --

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